

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/003029

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 A61K39/12 A61K39/29 A61K39/39 A61K38/00 A61P31/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, MEDLINE, CHEM ABS Data, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	VERNACCHIO L ET AL: "Effect of monophosphoryl lipid A (MPL<(>R)) on T-helper cells when administered as an adjuvant with pneumococcal-CRM197 conjugate vaccine in healthy toddlers" VACCINE, BUTTERWORTH SCIENTIFIC. GUILDFORD, GB, vol. 20, no. 31-32, 1 November 2002 (2002-11-01), pages 3658-3667, XP004388607 ISSN: 0264-410X abstract	1-4, 7-10, 13-15
Y	the whole document	5,6,11, 12
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the International filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the International filing date but later than the priority date claimed

- "T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- "&" document member of the same patent family

Date of the actual completion of the International search

15 July 2004

Date of mailing of the International search report

06/08/2004

Name and mailing address of the ISA

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 01/54719 A (SMITHKLINE BEECHAM BIOLOG ; VOSS GERALD (BE)) 2 August 2001 (2001-08-02) page 6, paragraph 2 - paragraph 4 page 8, paragraph 3 - paragraph 4 page 10, paragraph 1 page 13, paragraph 2	1-4, 7-10, 13-15
Y	the whole document	5,6,11, 12
X	WO 00/23105 A (SMITHKLINE BEECHAM BIOLOG ; GARCON NATHALIE (BE)) 27 April 2000 (2000-04-27) page 7, line 11 - page 8, line 31 page 6, line 18 - line 27 page 4, line 24 - page 5, line 31	1-4, 7-10, 13-15
Y	the whole document	5,6,11, 12
X	WO 01/17551 A (SMITHKLINE BEECHAM BIOLOG ; WETTENDORFF MARTINE ANNE CECIL (BE)) 15 March 2001 (2001-03-15) page 5, line 21 - line 23 page 7, line 16 - page 8, line 30 page 10, line 20 page 11, line 26 - page 12, line 20 page 15, line 1 - line 8 page 16, line 22 - line 25	1-4, 7-10, 13-15
Y	the whole document	5,6,11, 12
X	WO 98/15287 A (SMITHKLINE BEECHAM BIOLOG ; FRIEDE MARTIN (BE); GARCON NATHALIE (BE)) 16 April 1998 (1998-04-16) page 1, line 19 - line 23 page 3, line 12 - page 5, line 24 page 6, line 26 - line 29 examples 1-3,5	1-4, 7-10, 13-15
Y	the whole document	5,6,11, 12
X	WO 99/33488 A (DALEMANS WILFRIED L J ; PRIEELS JEAN PAUL (BE); SMITHKLINE BEECHAM BIO) 8 July 1999 (1999-07-08) page 8; example 1	7-10, 13-15

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	MCCLUSKIE MICHAEL J ET AL: "Parenteral and mucosal prime-boost immunization strategies in mice with hepatitis B surface antigen and CpG DNA" FEMS IMMUNOLOGY AND MEDICAL MICROBIOLOGY, vol. 32, no. 3, 18 February 2002 (2002-02-18); pages 179-185, XP002288583 ISSN: 0928-8244 abstract table 1 page 184, left-hand column, paragraph 2	7-10, 13-15
Y	WO 01/93905 A (CISTEM BIOTECHNOLOGIES GMBH ; EGYED ALENA (AT); LINGNAU KAREN (AT); SC) 13 December 2001 (2001-12-13) abstract. page 4, paragraph 2 - page 6, paragraph 2 page 12, paragraph 1 - page 13, paragraph 4	5,6,11, 12
Y	WO 02/053185 A (CISTEM BIOTECHNOLOGIES GMBH ; EGYED ALENA (AT); GRILL SONJA (AT); LING) 11 July 2002 (2002-07-11) page 3, paragraph 2 - page 5, paragraph 1	5,6,11, 12
Y	WO 02/32451 A (CISTEM BIOTECHNOLOGIES GMBH ; FRITZ JOERG (AT); MATTNER FRANK (AT); NA) 25 April 2002 (2002-04-25) page 3, paragraph 2 page 5, paragraph 2 - page 7, paragraph 1 page 12, paragraph 4 - page 13, paragraph 4	5,6,11, 12

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International application No.  
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### Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 14  
because they relate to subject matter not required to be searched by this Authority, namely:  
**Although claim 14 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.**
2. ☐ Claims Nos.:  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

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Information on patent family members

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